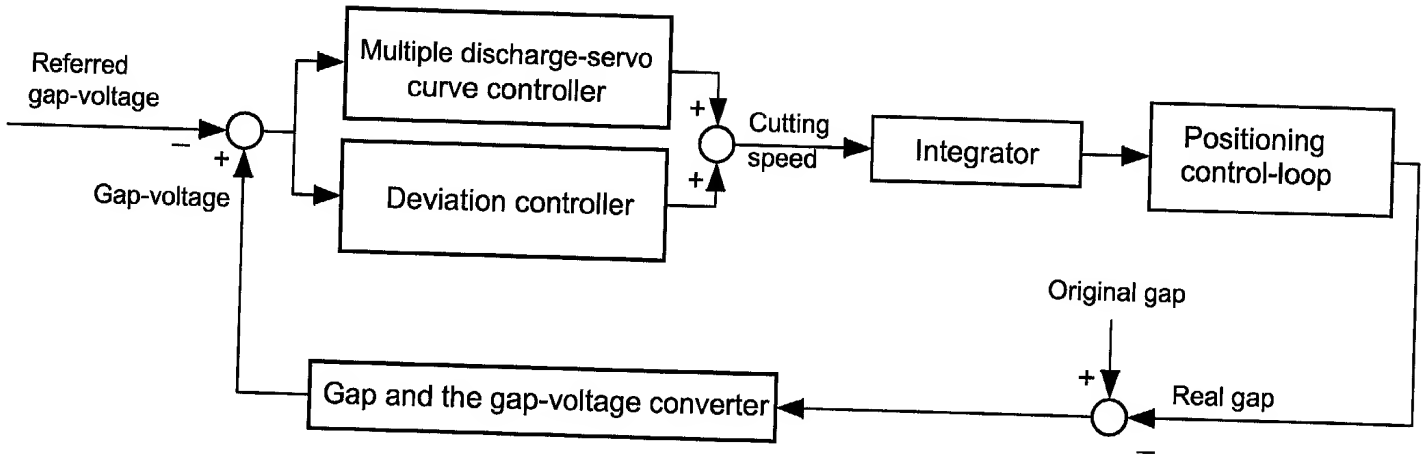
Referred
gap-voltage
Multiple discharge-servo
curve controller
Deviation controller
Cutting
speed
Integrator
Positioning
control-loop
Gap-voltage
Original gap
Real gap
Gap and the gap-voltage converter

FIG. 1

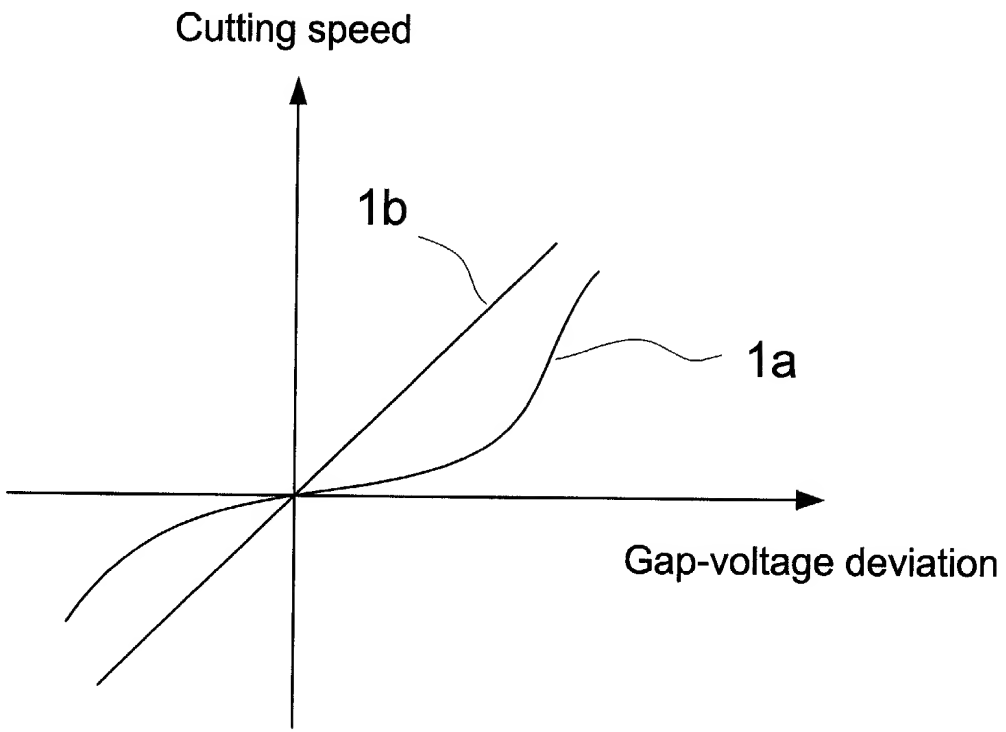

FIG. 2

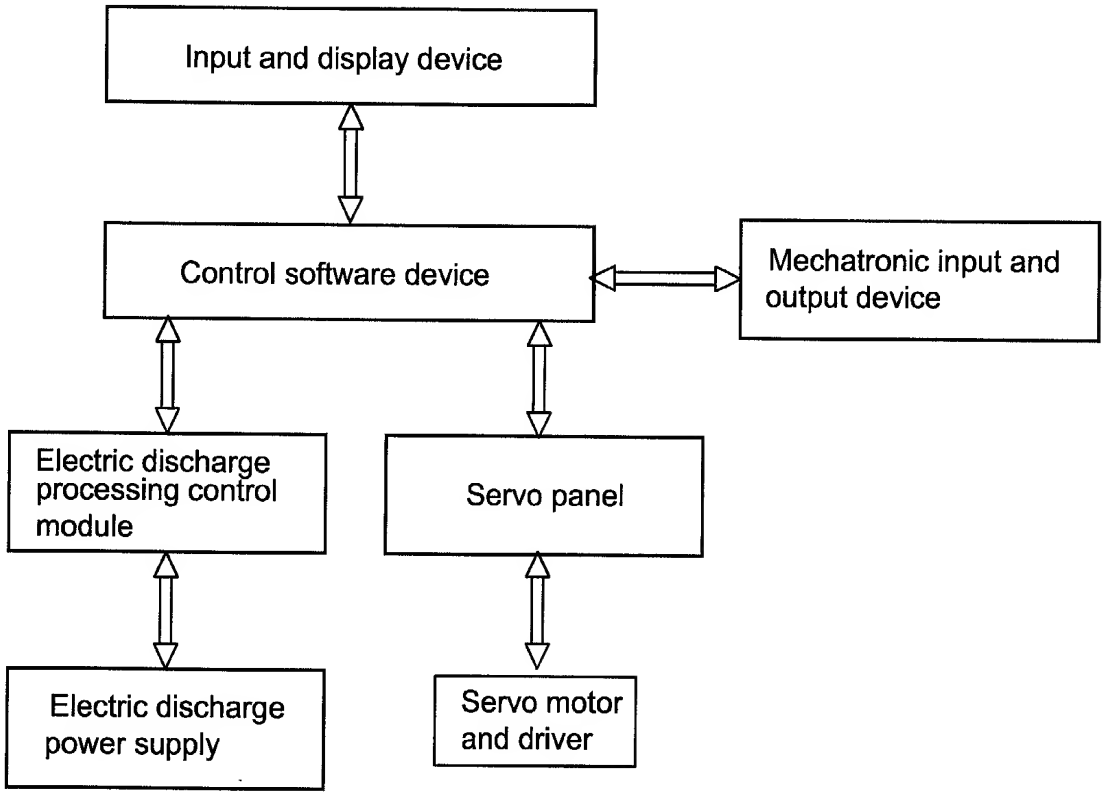
Input and display device
Control software device
Mechatronic input and output device
Electric discharge processing control module
Servo panel
Electric discharge power supply
Servo motor and driver

FIG. 3

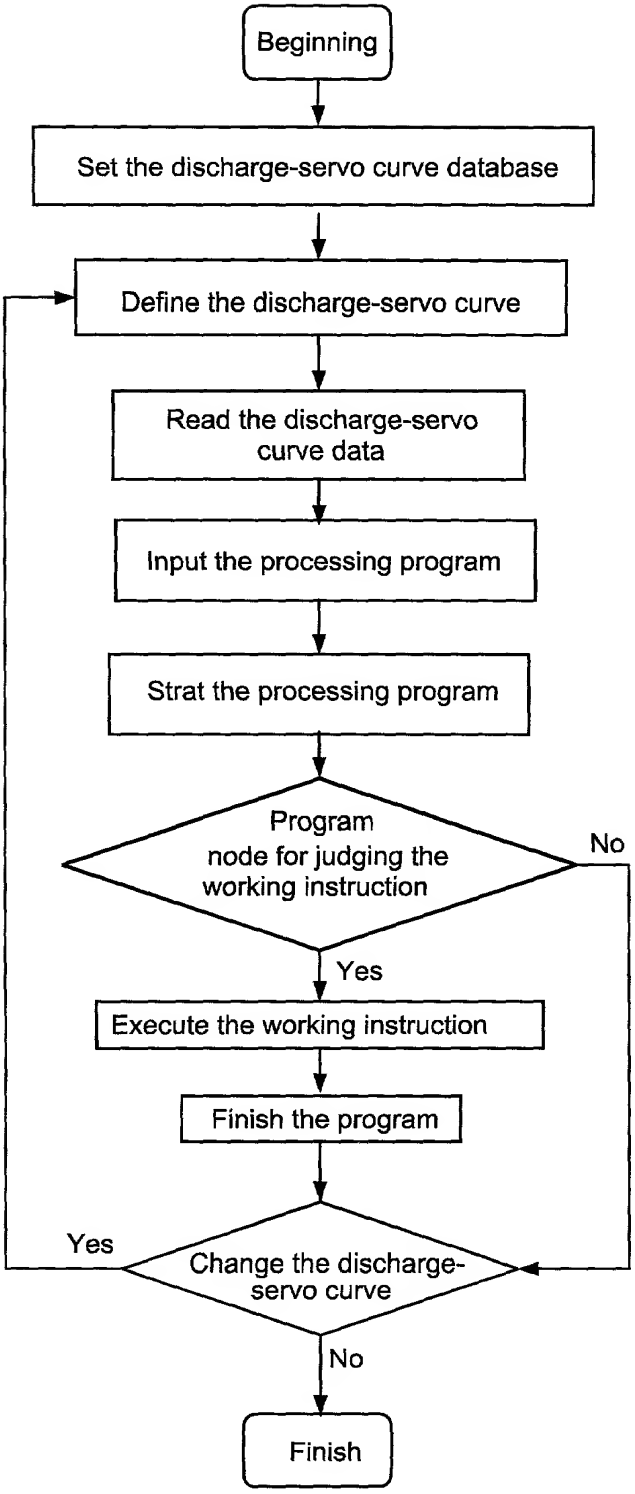
Beginning
Set the discharge-servo curve database
Define the discharge-servo curve
Read the discharge-servo curve data
Input the processing program
Strat the processing program
Program node for judging the working instruction
No
Yes
Execute the working instruction
Finish the program
Yes
Change the discharge-servo curve
No
Finish

FIG. 4

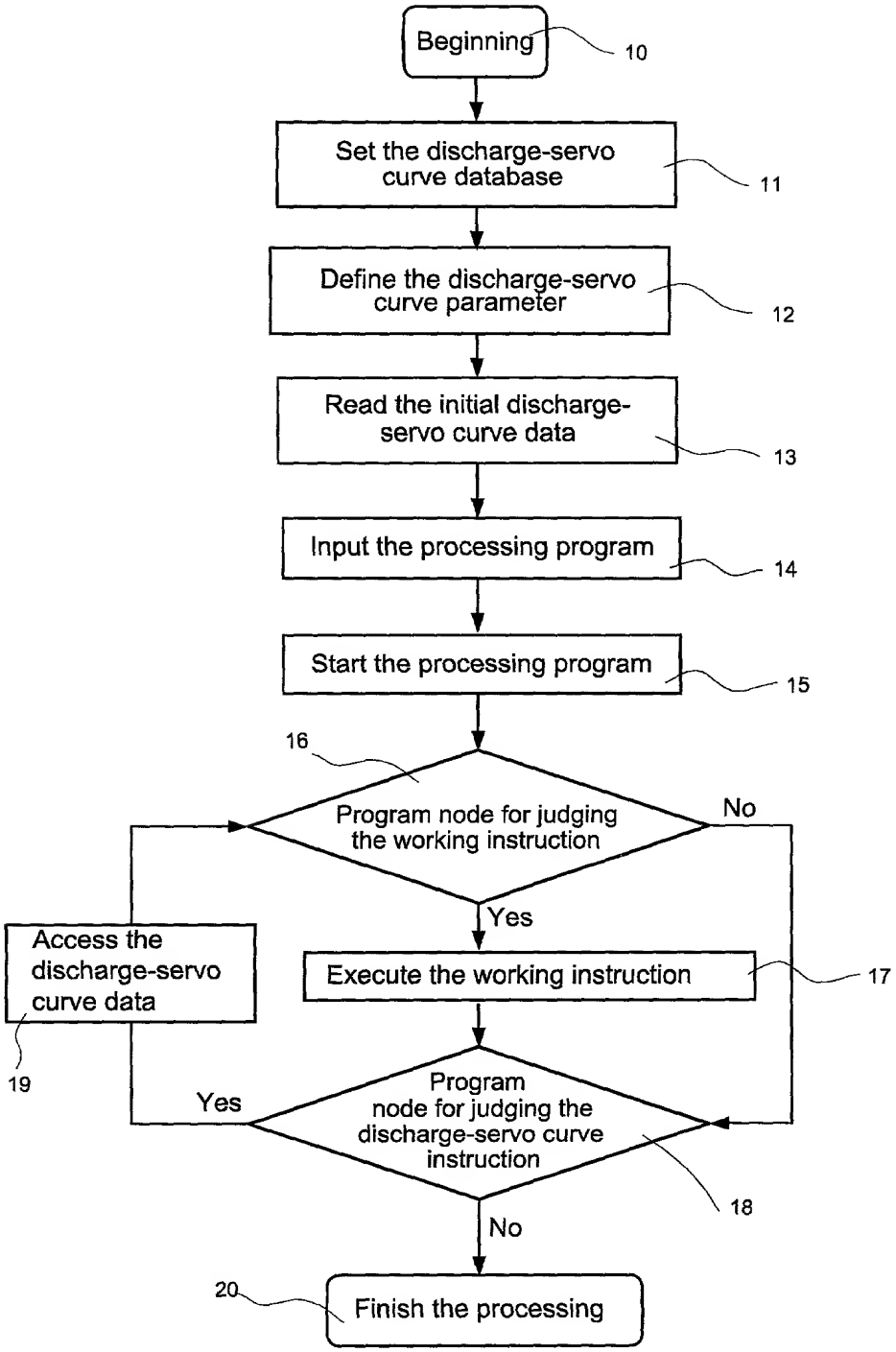
Beginning
10
Set the discharge-servo curve database
11
Define the discharge-servo curve parameter
12
Read the initial discharge-servo curve data
13
Input the processing program
14
Start the processing program
15
16
Program node for judging the working instruction
No
Yes
Access the discharge-servo curve data
19
Execute the working instruction
17
Yes
Program node for judging the discharge-servo curve instruction
18
No
20
Finish the processing

FIG. 5

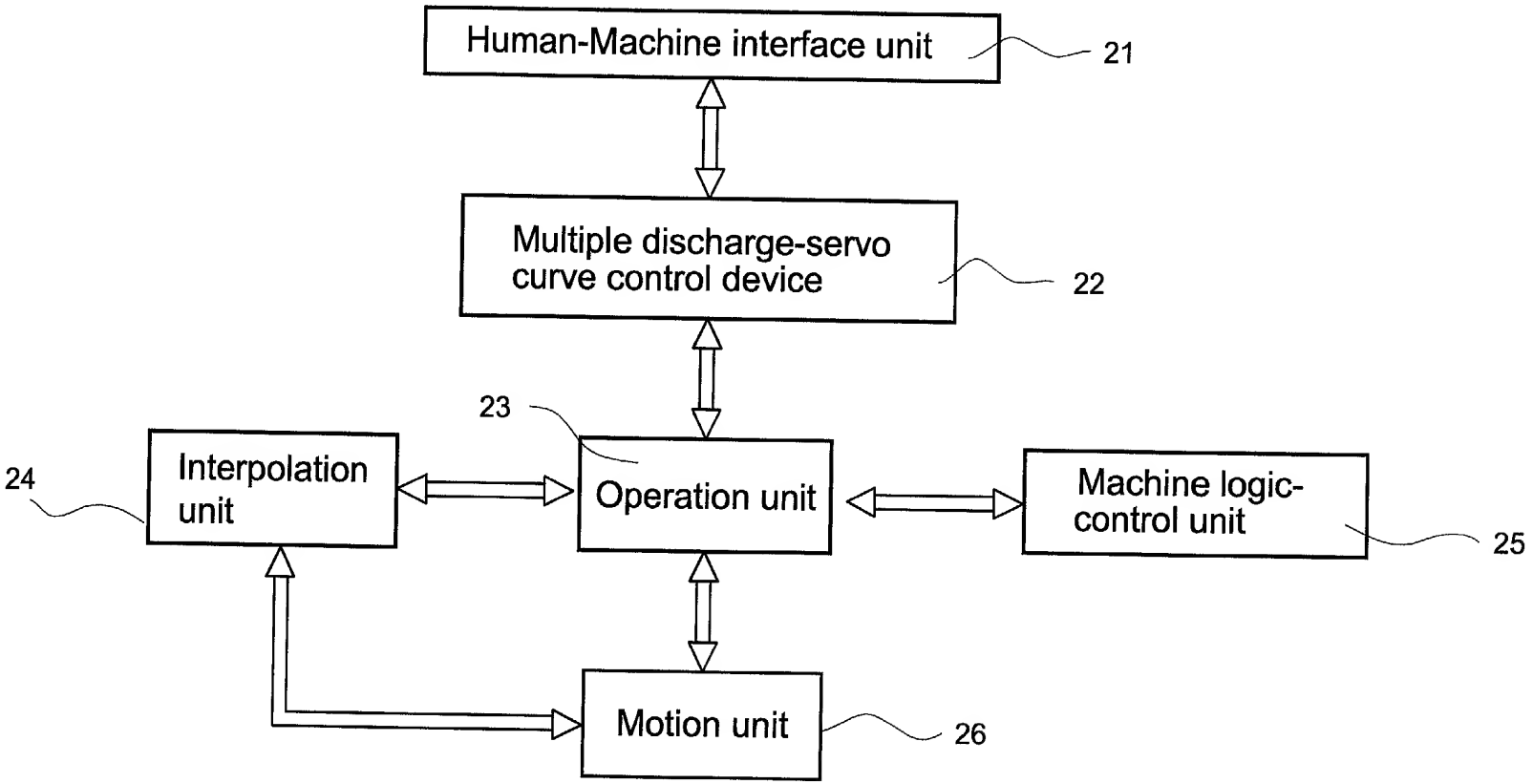
Human-Machine interface unit
21
Multiple discharge-servo curve control device
22
23
24
Interpolation unit
Operation unit
Machine logic-control unit
25
Motion unit
26

FIG. 6

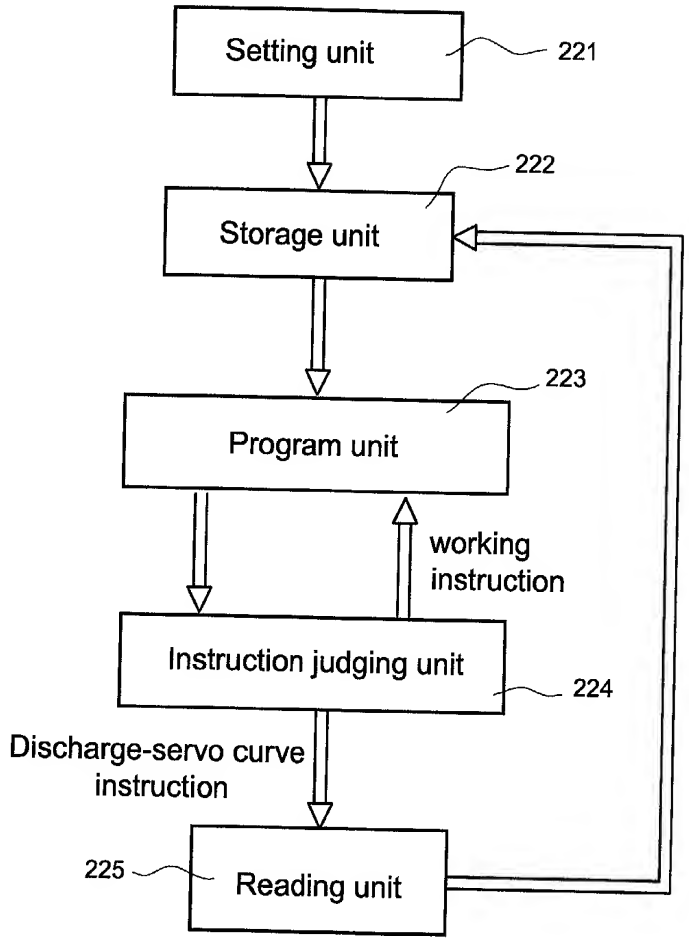
Setting unit
221
222
Storage unit
223
Program unit
working instruction
Instruction judging unit
224
Discharge-servo curve instruction
225
Reading unit

FIG. 7